

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) An Internet protocol private branch exchange comprising:
a software-based built-in control unit;
at least one card slot into which a control card is plugged; and
a data bus connecting said software-based built-in control unit and said card slot,
wherein said software-based built-in control unit includes:
a first management unit managing up to a first number of Internet protocol terminals;
and
an Internet protocol terminal registering unit connected to said first management unit
and said card slot,
wherein said control card includes a second management unit managing up to a
second number of Internet protocol terminals,
wherein said Internet protocol terminal registering unit compares a current number of
Internet protocol terminals managed by one of said first management unit and said second
management unit with a corresponding one of said first number and said second number
when an Internet protocol terminal requests communication, said Internet protocol terminal
having an identification number and an Internet protocol address,
wherein, if said current number is smaller than said one number, said Internet
protocol terminal registering unit associates said one management unit with said
identification number and said Internet protocol address, and said one management unit
manages said Internet protocol terminal, and
wherein, if said current number is equal to said one number, said Internet protocol
terminal registering unit associates another of said first management unit and said second
management unit with said identification number and said Internet protocol address, and
said another management unit manages said Internet protocol terminal.
2. (Previously Presented) The Internet protocol private branch exchange according to
Claim 1,
wherein when said one management unit manages said Internet protocol terminal,
said one management unit stores an Internet protocol address translation data indicative of a

relation between said identification number and said Internet protocol address of said Internet protocol terminal, and

wherein when said another management unit manages said Internet protocol terminal, said another management unit stores an Internet protocol address translation data indicative of said relation between said identification number and said Internet protocol address of said Internet protocol terminal.

3. (Previously Presented) The Internet protocol private branch exchange according to Claim 2,

wherein said software-based built-in control unit further comprises:

a main telephony unit; and

a port selecting unit connected to said main telephony unit, said one management unit and said another management unit,

wherein said main telephony unit generates a control signal which controls said Internet protocol terminal and transmits said control signal to said port selecting unit,

wherein said identification number is specified in said control signal,

wherein said port selecting unit checks which of said one management unit and said another management unit is managing said Internet protocol terminal, based on said identification number specified in said control signal,

wherein said port selecting unit transfers said control signal to a management unit which is managing said Internet protocol terminal,

wherein said management unit retrieves said Internet protocol address of said Internet protocol terminal from said Internet protocol address translation data by using said identification number specified in said control signal, and

wherein said management unit transmits said control signal to said Internet protocol terminal according to said Internet protocol address.

4. (Previously Presented) An Internet protocol private branch exchange system comprising:

an Internet protocol branch exchange;

a plurality of Internet protocol terminals; and

a network connecting said Internet protocol branch exchange and said plurality of Internet protocol terminals,

wherein said Internet protocol private branch exchange comprises:

a software-based built-in control unit;

at least one card slot into which a control card is plugged; and

a data bus connecting said software-based built-in control unit and said card slot,

wherein said software-based built-in control unit includes:

a first management unit managing up to a first number of Internet protocol terminals and connected to said network; and

an Internet protocol terminal registering unit connected to said first management unit, said card slot and said network,

wherein said control card includes a second management unit managing up to a second number of Internet protocol terminals and connected to said network,

wherein said Internet protocol terminal registering unit compares a current number of Internet protocol terminals managed by one of said first management unit and said second management unit with a corresponding one of said first number and said second number when one of said plurality of Internet protocol terminals requests communication, said one Internet protocol terminal having an identification number and an Internet protocol address,

wherein, if said current number is smaller than said one number, said Internet protocol terminal registering unit associates said one management unit with said identification number and said Internet protocol address, and said one management unit manages said one Internet protocol terminal, and

wherein, if said current number is equal to said one number, said Internet protocol terminal registering unit associates another of said first management unit and said second management unit with said identification number and said Internet protocol address, and said another management unit manages said one Internet Protocol terminal.

5. (Previously Presented) The Internet protocol private branch exchange system according to Claim 4,

wherein when said one management unit manages said one Internet protocol terminal, said one management unit stores an Internet protocol address translation data

indicative of a relation between said identification number and said Internet protocol address of said one Internet protocol terminal, and

wherein when said another management unit manages said one Internet protocol terminal, said another management unit stores an Internet protocol address translation data indicative of said relation between said identification number and said Internet protocol address of said one Internet protocol terminal.

6. (Previously Presented) The Internet protocol private branch exchange system according to Claim 5,

wherein said software-based built-in control unit further comprises:

a main telephony unit; and

a port selecting unit connected to said main telephony unit, said one management unit and said another management unit,

wherein said main telephony unit generates a control signal which controls said one Internet protocol terminal and transmits said control signal to said port selecting unit,

wherein said identification number is specified in said control signal,

wherein said port selecting unit checks which of said one management unit and said another management unit is managing said one Internet protocol terminal, based on said identification number specified in said control signal,

wherein said port selecting unit transfers said control signal to a management unit which is managing said one Internet protocol terminal,

wherein said management unit retrieves said Internet protocol address of said one Internet protocol terminal from said Internet protocol address translation data by using said identification number specified in said control signal, and

wherein said management unit transmits said control signal to said one Internet protocol terminal according to said Internet protocol address.

7. (Previously Presented) The Internet protocol private branch exchange system according to Claim 6,

wherein said one Internet protocol terminal transmits a signal to said management unit which is managing said one Internet protocol terminal,

wherein said Internet protocol address is specified in said signal,
wherein said management unit retrieves said identification number of said one Internet protocol terminal from said Internet protocol address translation data by using said Internet protocol address specified in said signal, and incorporates said identification number in said signal,
wherein said management unit transmits said signal to said main telephony unit through said port selecting unit, and
wherein said main telephony unit carries out processing with regard to said one IP Internet protocol terminal according to said identification number specified in said signal.

8. (Currently Amended) A ~~computer program product~~ computer-readable medium encoded with a computer program, said program comprising:

~~a computer-readable medium having~~ computer readable program code embodied therein configured for controlling an Internet protocol private branch exchange [,] said ~~Internet protocol branch exchange~~ comprising at least one card slot into which a control card is plugged, said control card managing up to a second number of Internet protocol terminals[,];

~~said computer program product comprising:~~

computer readable code as a first code configured to cause a computer to manage up to a first number of Internet protocol terminals;

computer readable code configured to cause a computer to compare a current number of Internet protocol terminals managed by one of said first code and said control card with a corresponding one of said first number and said second number when an Internet protocol terminal requests communication, said Internet protocol terminal having an identification number and an Internet protocol address;

computer readable code configured to associate said one of said first code and said control card with said identification number and said Internet protocol address and to have said one of said first code and said control card manage said Internet protocol terminal, if said current number is smaller than said one number; and

computer readable code configured to associate another of said first code and said control card with said identification number and said Internet protocol address and to have

said another of said first code and said control card manage said Internet protocol terminal, if said current number is equal to said one number.

9. (Previously Presented) The Internet protocol private branch exchange according to Claim 1, wherein the Internet protocol branch exchange further comprises a flexible data memory and a base data memory.

10. (Previously Presented) The Internet protocol private branch exchange according to Claim 1, wherein said software-based built-in control unit further comprises a first interface unit connected to the first management unit.

11. (Previously Presented) The Internet protocol private branch exchange according to Claim 10, wherein the software-based built-in control unit connects to a local area network via the first interface unit.

12. (Previously Presented) The Internet protocol private branch exchange according to Claim 10, wherein the Internet protocol terminal registering unit is connected to the first interface unit.

13. (Previously Presented) The Internet protocol private branch exchange according to Claim 1, wherein the Internet protocol terminal registering unit is connected to the second management unit via the data bus.

14. (Previously Presented) The Internet protocol private branch exchange according to Claim 1, wherein said control card further comprises a second interface unit connected to the second management unit.

15. (Previously Presented) The Internet protocol private branch exchange according to Claim 14, wherein said control card and said software-based built-in control unit connect to an local area network via the second interface unit.

16. (Previously Presented) The Internet protocol private branch exchange according to Claim 9, wherein the base data memory stores data including an extension data and a management unit property data.

17. (Previously Presented) The Internet protocol private branch exchange according to Claim 9, wherein the flexible data memory stores data which are updated automatically according to changes in states of the Internet Protocol terminals.

18. (Previously Presented) The Internet protocol private branch exchange according to Claim 9, wherein the flexible data memory stores a management unit identification data, a management unit port data, and a matching data.

19. (Previously Presented) The Internet protocol private branch exchange according to Claim 18, wherein the management unit identification data indicates the port numbers, the modes, and the numbers of the Internet Protocol terminals currently managed in relationship to the management unit identification of the respective management units.

20. (Previously Presented) The Internet protocol private branch exchange according to Claim 18, wherein the management unit port data indicates the management unit identification in relationship to the respective port numbers of the management units.